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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/187,669A

DATE: 02/05/2002

TIME: 16:54:46

Input Set : A:\ES.txt

Output Set: N:\CRF3\02052002\I187669A.raw

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3 <110> APPLICANT: MARBAN, EDUARDO 5 <120> TITLE OF INVENTION: SOMATIC TRANSFER OF MODIFIED GENES TO PREDICT DRUG **EFFECTS** 8 <130> FILE REFERENCE: 47728(1699) 10 <140> CURRENT APPLICATION NUMBER: 09/187,669A 11 <141> CURRENT FILING DATE: 1998-11-05 13 <150> PRIOR APPLICATION NUMBER: 60/064,893 14 <151> PRIOR FILING DATE: 1997-11-07 16 <160> NUMBER OF SEQ ID NOS: 2 18 <170> SOFTWARE: PatentIn Ver. 2.1 20 <210> SEQ ID NO: 1 21 <211> LENGTH: 630 22 <212> TYPE: PRT 23 <213> ORGANISM: Unknown Organism 25 <220> FEATURE: 26 <223> OTHER INFORMATION: Description of Unknown Organism: Mammalian ion 27 channel protein 29 <400> SEQUENCE: 1 30 Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala 10 33 Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg 25 20 36 Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser 40 39 Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp 55 50 42 Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr 70 75 45 Gln Gln Tyr Phe Phe Asp Arg Asp Pro Asp Ile Phe Arg His Ile Leu 90 48 Asn Phe Tyr Arg Thr Gly Lys Leu His Tyr Pro Arg His Glu Cys Ile 110 49 100 105 51 Ser Ala Tyr Asp Glu Glu Leu Ala Phe Phe Gly Leu Ile Pro Glu Ile 115 120 125 54 Ile Gly Asp Cys Cys Tyr Glu Glu Tyr Lys Asp Arg Arg Arg Glu Asn 135 57 Ala Glu Arg Leu Gln Asp Asp Ala Asp Thr Asp Asn Thr Gly Glu Ser 150 155 60 Ala Leu Pro Thr Met Thr Ala Arg Gln Arg Val Trp Arg Ala Phe Glu 170 165 63 Asn Pro His Thr Ser Thr Met Ala Leu Val Phe Tyr Tyr Val Thr Gly 185 66 Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Val Pro

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|                     |                           |                 | 200          |           | 205       |                      |
|---------------------|---------------------------|-----------------|--------------|-----------|-----------|----------------------|
| 67 195              | )                         | <b>63</b> 274 - | 200          | Clu Tou   |           | cly clu Ara          |
| 69 Cys Gly Se       | Ser Pro                   | GIY HIS         | ite rås      | GIU Leu   | 220       | GIY GIU AIG          |
| 70 210              | _                         | 215             |              |           |           | Wat Ila Dha          |
| 72 Tyr Ala Va       | L Ala Phe                 | Phe Cys         | Leu Asp      | Thr Ala   | Cys var   | Met lie Phe<br>240   |
| 73 225              |                           | 230             |              | 235       | D         |                      |
| 75 Thr Val Glu      |                           | Leu Arg         | Leu Ala      |           | Pro Ser   | Arg Tyr Arg          |
| 76 .                | 245                       |                 |              | 250       |           | 255                  |
| 78 Phe Val Ar       | g Ser Val                 | Met Ser         | Ile Ile      | Asp Val   | Val Ala   | Ile Leu Pro          |
| 79                  | 260                       |                 | 265          |           |           | 270                  |
| 81 Tyr Tyr Ile      | e Gly Leu                 | Val Met         | Thr Asp      | Asn Glu   | Asp Val   | Ser Gly Ala          |
| 82 27               | 5                         |                 | 280          |           | 285       |                      |
| 84 Phe Val Th       | r Leu Arg                 | Val Phe         | Arg Val      | Phe Arg   | Ile Phe   | Lys Phe Ser          |
| 85 290              | <b>,</b>                  | 295             |              |           | 300       |                      |
| 87 Arg His Se       | r Glv Glv                 | Leu Arg         | Ile Leu      | Gly Tyr   | Thr Leu   | Lys Ser Cys          |
| 88 305              | 2 011 011                 | 310             |              | 315       |           | 320                  |
| 90 Ala Ser Gl       | ı Len Gly                 | Dhe Leu         | Leu Phe      | Ser Leu   | Thr Met   | Ala Ile Ile          |
|                     | 325 325                   |                 | 200 1110     | 330       |           | 335                  |
| 91<br>93 Ile Phe Al | 3 <i>23</i><br>1 mb - Val | Mot Pho         | Tur Ala      |           | Glv Ser   | Ser Ala Ser          |
|                     |                           | Met File        | 345          | . Old Lib | 017 001   | 350                  |
| 94                  | 340                       | D 31-           |              |           | Thr Tle   |                      |
| 96 Lys Phe Th       |                           | Pro Ala         |              | IIb IAI   | 365       | var int nec          |
| 97 35               | 5                         | <b>63</b> 3     | 360          | Dwo Twa   |           | Ala Cly Lys          |
| 99 Thr Thr Le       | u Gly Tyr                 |                 |              | Pro Lys   | 1111 116  | Ala Gly Dys          |
| ·100 370            | _                         | 37              |              |           | 380       | Tlo Ala Tou          |
| 102 Ile Phe G       | ly Ser Il                 |                 | r Leu Se     | r Gra var | Leu val   | 11e Ala Leu<br>400   |
| 103 385             |                           | 390             | _            | 395       |           |                      |
| 105 Pro Val P       | ro Val Il                 | e Val Se        | r Asn Ph     | e Ser Arg | 1 IIE LA1 | HIS GIN ASH          |
| 106                 | 40                        | 5               | •            | 410       | _         | 415                  |
| 108 Gln Arg A       | la Asp Ly                 | 's Arg Ar       | g Ala Gl     | n Lys Lys | s Ala Arg | Leu Ala Arg          |
| 109                 | 420                       |                 | 42           | 5         |           | 430                  |
| 111 Ile Arg A       | la Ala Ly                 | s Ser Gl        | y Ser Al     | a Asn Ala | a Tyr Met | Gln Ser Lys          |
| 112 4               | 35                        |                 | 440          |           | 44:       | •                    |
| 114 Arg Asn G       | ly Leu Le                 | u Ser As        | n Gln Le     | u Gln Sei | r Ser Glu | ı Asp Glu Pro        |
| 115 450             |                           | 45              | 55           |           | 460       |                      |
| 117 Ala Phe V       | al Ser Ly                 | s Ser Gl        | y Ser Se     | r Phe Glu | ı Thr Glı | h His His His        |
| 118 465             |                           | 470             |              | 475       | 5 .       | 480                  |
| 120 Len Len H       | is Cvs Le                 | eu Glu Ly       | s Thr Th     | r Asn His | s Glu Phe | e Val Asp Glu        |
| 120 Bed Bed II      | 48                        |                 |              | 490       |           | 495                  |
| 123 Cln Val D       | he Glu Gl                 | u Ser Cy        | s Met Gl     |           | a Thr Vai | L Asn Arg Pro        |
|                     | 500                       | a ber of        | 50           |           |           | 510                  |
| 124                 | ic Ser Dr                 | n Ser Le        |              |           | n Glv Va  | l Thr Ser Thr        |
|                     |                           | . UGI HE        | 520          |           | 52        | 5                    |
| 127 5               | 15                        | og Uio Te       |              | r Dha Ar  |           | Asn Ala Asn          |
|                     | er arg Al                 | g ніз гу.<br>53 | S DAS III    | T FIIC VI | 540       |                      |
| 130 530             | 1 O                       |                 |              | a cla cla |           | r Thr Tle Gln        |
|                     | TA Set Hi                 |                 | y ser va     | 11 GIN GI | r nen se. | r Thr Ile Gln<br>560 |
| 133 545             |                           | 550             | ·<br>D== 7 = |           |           |                      |
|                     |                           |                 | it hio re    | u Ser AS  | n ser ar  | g Ser Ser Leu<br>575 |
| 136                 | . 56                      | 00              | 17a 1 7      | 570       | o Cuc Cl  |                      |
|                     |                           | tu GIU Cy       | s val Ly     | s Leu AS  | u cys GI  | u Gln Pro Tyr        |
| 139                 | 580                       |                 | 58           | 50        |           | 590 .                |

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141 Val Thr Thr Ala Ile Ile Ser Ile Pro Thr Pro Pro Val Thr Thr Pro
                               600
144 Glu Gly Asp Asp Arg Pro Glu Ser Pro Glu Tyr Ser Gly Gly Asn Ile
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145 610
147 Val Arg Val Ser Ala Leu
148 625
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156 <220> FEATURE:
157 <223> OTHER INFORMATION: Description of Unknown Organism: Mammalian ion
          channel protein
158
160 <400> SEQUENCE: 2
161 Met Ala Ala Gly Val Ala Ala Trp Leu Pro Phe Ala Arg Ala Ala Ala
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164 Ile Gly Trp Met Pro Val Ala Ser Gly Pro Met Pro Ala Pro Pro Arg
                20
167 Gln Glu Arg Lys Arg Thr Gln Asp Ala Leu Ile Val Leu Asn Val Ser
                                40
170 Gly Thr Arg Phe Gln Thr Trp Gln Asp Thr Leu Glu Arg Tyr Pro Asp
                            55
173 Thr Leu Leu Gly Ser Ser Glu Arg Asp Phe Phe Tyr His Pro Glu Thr
                                            75
                        70
176 Gln Gln Tyr Phe Phe Asp Arg Asp Pro Asp Ile Phe Arg His Ile Leu
                                        90
179 Asn Phe Tyr Arg Thr Gly Lys Leu His Tyr Pro Arg His Glu Cys Ile
                                   105
180
182 Ser Ala Tyr Asp Glu Glu Leu Ala Phe Phe Gly Leu Ile Pro Glu Ile
                               120
           115
185 Ile Gly Asp Cys Cys Tyr Glu Glu Tyr Lys Asp Arg Arg Arg Glu Asn
                                               140
                           135
188 Ala Glu Arg Leu Gln Asp Asp Ala Asp Thr Asp Asn Thr Gly Glu Ser
                                        . 155
                       150
191 Ala Leu Pro Thr Met Thr Ala Arg Gln Arg Val Trp Arg Ala Phe Glu
                                       170
                   165
194 Asn Pro His Thr Ser Thr Met Ala Leu Val Phe Tyr Tyr Val Thr Gly
                                   185
               180
197 Phe Phe Ile Ala Val Ser Val Ile Ala Asn Val Val Glu Thr Gly Ser
                               200
            195
200 Arg His Asp Lys Ile His
201
        210
```

VERIFICATION SUMMARY

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A:\>DIR

Volum in drive A has no label Directory of A:\

File not found

1,457,664 bytes free

A:\>

Opserer mensogn uten STIC PC Flied to read submitted CRF

A:\>DIR

Volume in drive A has no label Directory of A:\

File not found

1,457,664 bytes free

A:\>

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